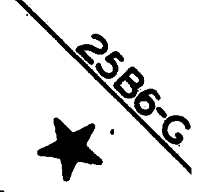




25B6-G

POWER AMPLIFIER PENTODE

Heater ■	Coated Unipotential Cathode		
Voltage	25		a-c or d-c volts
Current	0.3		amp.
Maximum Overall Length			4-5/8"
Maximum Seated Height			4-1/16" ←
Maximum Diameter			1-13/16"
Bulb			ST-14
Base			Medium Shell Octal 7-Pin

Pin 1 - No Connection
Pin 2 - Heater
Pin 3 - Plate
Pin 4 - Screen
Pin 5 - Grid
Pin 7 - Heater
Pin 8 - Cathode

BOTTOM VIEW (G-7S)

Mounting Position: Any

AMPLIFIER

Plate Voltage	200 max. volts
Screen Voltage	135 max. volts
Plate Dissipation	12.5 max. watts
Screen Dissipation	2 max. watts

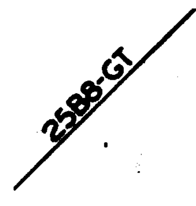
Typical Operation and Characteristics-Class A_1 Amplifier:

Plate Voltage	105	135	200	volts
Screen Voltage	105	135	135	volts
Grid Voltage ▲	-16	-22	-23	volts
Peak A-F Grid Volt.	16	22	23	volts
Zero-Sig. Plate Cur.	48	61	62	ma.
Max.-Sig. Plate Cur.	55	69	71	ma.
Zero-Sig. Screen Cur.	2	2.5	1.8	ma.
Max.-Sig. Screen Cur.	10	14.5	13	ma.
Plate Resistance	15500	15000	18000	ohms
Transconductance	4800	5000	5000	μmhos
Load Resistance	1700	1700	2500	ohms
Total Harmonic Dist.	12.5	14	15	%
Second Harmonic Dist.	7	8	8.5	%
Third Harmonic Dist.	10	11	11	%
Max.-Sig. Power Output	2.4	4.3	7.1	watts

■ In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.

▲ The type of input coupling should not introduce too much resistance in the grid circuit. Transformer- or impedance-input coupling devices are recommended. When the grid circuit has a resistance not higher than 0.1 megohm, fixed bias may be used; for higher values, cathode bias is required. With cathode bias, the grid circuit may have a resistance not to exceed 0.5 megohm.

← Indicates a change.





25B8-GT

TRIODE-PENTODE

Heater ■	Coated Unipotential Cathodes	
Voltage	25	a-c or d-c volts
Current	0.15	amp.
Direct Interelectrode Capacitances:°		
Triode Unit:		
Grid to Plate	2.2	μμf
Grid to Cathode	5.0	μμf
Plate to Cathode	4.6	μμf
Pentode Unit:		
Grid to Plate	0.02	μμf
Input	5.5	μμf
Output	10.0	μμf
Pentode Grid to Triode Grid	0.02	μμf
Pentode Plate to Triode Grid	0.075	μμf
Pentode Grid to Triode Plate	0.009	μμf
Maximum Overall Length		3-5/16"
Maximum Seated Height		2-3/4"
Maximum Diameter		1-5/16"
Bulb		T-9
Cap		Skirted Miniature
Base		Intermediate Shell Octal 8-Pin

Pin 1 - Pentode Cathode
Pin 2 - Heater
Pin 3 - Pentode Plate
Pin 4 - Pentode Screen
Pin 5 - Triode Plate
Pin 6 - Triode Cathode
Pin 7 - Heater
Pin 8 - Triode Grid
Cap - Pentode Grid

BOTTOM VIEW (8T)

TRIODE UNIT

Typical Operation and Characteristics:

Plate	100	volts
Grid	-1	volt
Amp. Fact.	112	
Plate Res.	75000	ohms
Transcond.	1500	μmhos
Grid Bias for Plate Cur. Cut-Off (approx.)	-2.5	volts
Plate Current	0.6	ma.

PENTODE UNIT

Typical Operation and Characteristics:

Plate	100	volts
Screen	100	volts
Grid	-3	volts
Plate Res.	185000	ohms
Transcond.	2000	μmhos
Grid Bias for Transcond. of 2 μmhos	-41	volts
Plate Cur.	7.6	ma.
Screen Cur.	2	ma.

■ In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.

° Values are approximate.

May 1, 1941 TENTATIVE DATA

RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.